

**United States Environmental Protection Agency
Region X
POLLUTION REPORT**

Date: Tuesday, September 06, 2005
From: Daniel Heister, On-Scene Coordinator

To: Chris Field, EPA Region 10

Subject:
POLREP 4
North Ridge Estates 2005 Fund Lead Removal Action
3942 Old Fort Road, Klamath Falls, OR
Latitude: 42.2625
Longitude: -121.7446

POLREP No.:	4	Site #:	10BT
Reporting Period:	August 29 through September 5, 2005	D.O. #:	0035
Start Date:	8/9/2005	Response Authority:	CERCLA
Mob Date:	8/8/2005	Response Type:	Time-Critical
Completion Date:		NPL Status:	Non NPL
CERCLIS ID #:	ORN001002476	Incident Category:	Removal Action
RCRIS ID #:		Contract #	68-S7-01-64

Site Description

North Ridge Estates is located approximately three miles north of Klamath Falls, Klamath County, Oregon, on Old Fort Road and North Ridge Drive. The North Ridge Estate site is formerly the Klamath Falls Marine Recuperational Barracks facility, built in 1944 by the United States Department of Defense. In 1946, the property was transferred to the State of Oregon for use by the Oregon Institute of Technology.

When the Oregon Institute of Technology relocated in 1966, the property was transferred into private ownership. From 1966 to the mid-1970s, the property owners sold some of the buildings (primarily the dormitories) to individual buyers, who stripped the vacant buildings of salvageable materials such as copper and wood.

The North Ridge Estate property was purchased in December 1977 by the MBK Partnership of Klamath Falls, the present property developer. When MBK purchased the property, many of the original buildings remained, including the largest site buildings (e.g., mess hall, vehicle maintenance, gymnasium, covered swimming pool, and steam plant). After purchasing the property, MBK began a facility-wide project to demolish the remaining buildings so that the property could be subdivided into residential lots.

MBK performed the demolition on a facility-wide scale by knocking over the buildings with the ACM in place. After salvageable building materials were recovered, the remaining demolition debris (including the ACM) was crunched up to reduce the size and then buried on site. Reportedly, asbestos insulation was stripped from piping and boilers, the metal was sold, and the insulation was left on site. In the late 1970s, the Oregon Department of Environmental Quality (DEQ) responded to a complaint of openly accumulated asbestos debris at the property and observed a bulldozer driving over four to six acres of demolition debris. The report described a great amount of “white, fluffy” insulation material being blown around the site by strong winds.

In 1979, EPA discovered demolition debris believed to contain ACM on the property currently owned by MBK. Because this demolition debris was exposed and uncontained on the MBK-owned property, MBK was issued a compliance order by the EPA pursuant to Section 113 (a)(3) of the Clean Air Act regarding the requirement to develop a plan for disposal of ACM contained within demolition debris on September 17, 1979. The compliance order stated that MBK “failed to properly strip asbestos containing materials from the insulation pipes when the pipes became exposed as required.” It further stated that “the company caused or permitted asbestos containing waste material to remain exposed, uncontained and undisposed of at the demolition site.”

The compliance order required MBK to submit a plan addressing the ACM from “...the present demolition operation and all material remaining from previous demolition.” The plan was to provide the EPA with a detailed description of the ACM disposal site. After proper disposal of the ACM, the order further required MBK to register the inactive waste site with Klamath County. In 2003, EPA was unable to identify any deed restrictions for ACM disposal sites at North Ridge Estates.

On April 13, 1993, a preliminary inspection, completed under the Defense Environmental Restoration Program, found that there were no hazardous conditions at the former Marine Recuperation Barracks. The memorandum stated that only two buildings, the warehouse and former brig, remained at the site. There is no reference to asbestos or ACM in the memorandum.

Currently, twenty-three of the lots in the project area have been sold and developed as single-family homes, and these homes have been occupied for residential use. Other undeveloped lots remain in private ownership or are owned by MBK.

In June of 2001, DEQ received a complaint of two large piles of asbestos insulated pipe on the surface of a lot being developed in North Ridge Estates. The DEQ inspector observed “white to pale brown colored platy looking” fragments on the lot and on other lots throughout the subdivision. An asbestos survey was conducted in 2002. Out of the 81 acres surveyed, over 50 acres contained ACM. In June 2002, DEQ and MBK entered into a Mutual Agreement and Order (MAO; Order No. AQ/AB-ER-01-250A). The MAO essentially provided for a survey of affected properties to identify visible ACM and outlined provisions and protocol for the removal of this material. In the summer of 2002 MBK reportedly removed approximately 50 tons of ACM from the surface of residential lots in the subdivision.

In the spring of 2003, after winter snows had melted away, additional ACM debris was observed on the ground, and in April 2003, DEQ referred the site to EPA Region 10. An Administrative Order on Consent (AOC) was signed by EPA Region 10 and MBK in May of 2003. Under the AOC a removal action was conducted by MBK and its contractors with close EPA oversight. Actions included: removal of visible surface ACM, identifying the extent and degree of asbestos contamination through extensive soil and air sampling, and identifying and mitigating further exposure through excavation or capping of burial pits and delineation of remaining buried steam

line. A parallel and contemporaneous Streamlined Risk Assessment was conducted in cooperation with an EPA Region 10 toxicologist and MBK's asbestos consultant.

The responsible party-led removal action was carried out from June 2003 through August 2004. Approximately seven tons of visible ACM were removed by hand from the surface of occupied lots, approximately 77 tons of heavily contaminated soil were excavated, 13 potential burial locations were identified and stabilized, and several thousand linear feet of buried steam pipe were located. EPA did a limited survey of occupied lots in April 2004 and March 2005. When the surface pick up of the lots was completed in September of 2003 visible ACM was mostly nonexistent. As of the March 2005 survey, wind erosion, snow melt, foot traffic and frost heave are believed to have caused resurfacing of near-surface ACM..

On April 25, 2005, EPA signed an action memorandum implementing a voluntary relocation action for North Ridge Estates residents. Of the twenty-seven households that were deemed eligible, fifteen opted to be relocated from June 10, 2005, to September 10, 2005.

In June and July of 2005, the EPA Region 10 Removal Program and its contractors conducted a removal assessment on the site. During this assessment, workers encountered significant resurfacing of mag insulation and conducted separate abatement actions at three residences.

Current Activities

***August 29, 2005. PST-1, START-3. The Pacific Strike Team and START are on site to maintain daytime site security and to prepare for the week's activities, which include a meeting with the Klamath County Commissioners, the application of encapsulant to mag and Air Cell hot spot areas, and the September round of ambient air sampling.

***August 30, 2005. OSC-1, PST-1, START-2. OSC Heister arrives on site and hosts a meeting with the Klamath County Commissioners (Al Switzer, Bill Brown, and John Elliot) to discuss site conditions and the progress of EPA's clean-up activities. Cliff Walkey of Oregon DEQ is present for the meeting.

***August 31, 2005. OSC-1, PST-1, START-2. The OSC manages issues related to residents moving back from temporary relocation. START and PST prepare the site for the encapsulant application and ambient air sampling.

***September 1, 2005. OSC-1, PST-1, START-2, Alpine Abatement-2 (subcontractor to ERRS). Alpine Abatement is on site to apply an encapsulant to specific mag and Air Cell hot spot areas. The purpose is to provide an additional measure of control to prevent asbestos fibers from becoming airborne at areas where a large quantity of mag or Air Cell insulation was previously removed. The encapsulant was applied to a total of nine areas in the subdivision.

***September 2, 2005 through September 5, 2005. OSC-1, PST-1, START-2, USACE-1. Relocation expert Susan Hill from the US Army Corps of Engineers (USACE) is here to assist EPA with relocation issues as residents begin to move back to their homes. The OSC and USACE Hill manage these relocation issues, inspect the rental properties as residents move out, and coordinate the return of rental furniture and appliances.

START and PST collect ambient air samples at six fixed locations in the North Ridge Estates subdivision. Air samples are being collected for four consecutive days at the six locations, and the samples will be analyzed for asbestos by ISO TEM Method 10312. This is the fourth round of

ambient air sampling performed by START this summer at North Ridge Estates. Before the Removal Action began, START performed three previous rounds of air sampling in June, July, and August.

Planned Removal Actions

The removal action is being performed as a surficial cleanup of friable ACM (mag and Air Cell insulation) from each target property in the subdivision. Prior to surficial cleaning, the OSC, PST, and/or START surveys a property to identify areas of friable ACM contamination. These areas are flagged, and then the abatement crew systematically walks the property to pick up the contamination. Once known areas of contamination are cleaned up, the abatement crew will also walk the remainder of the property to search for and pick up any mag and Air Cell insulation. After the abatement crew has completed the cleanup of the property, the OSC, PST, and/or START returns to the property to clear it. If additional contamination is found, the abatement crew returns and cleans it again. This cleaning / clearing process continues until no mag or Air Cell insulation is seen.

Next Steps

The OSC, PST, and START will stay on site to oversee the end of relocation, and they will continue to monitor the site for any resurfacing friable mag or Air Cell. Currently, EPA is planning to demobilize from the site during the weekend of September 10.

Key Issues

With residents beginning to move back, EPA is continuing to emphasize neighborhood security. During the day, the OSC, PST, and START continue to watch residences that remain vacant, and the security contractor continues to patrol the neighborhood overnight.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$230,000.00	\$41,000.00	\$189,000.00	82.17%
RST/START	\$185,000.00	\$67,800.00	\$117,200.00	63.35%
Intramural Costs				
USEPA - Direct (Region, HQ)	\$40,000.00	\$0.00	\$40,000.00	100.00%
USEPA - InDirect	\$30,000.00	\$0.00	\$30,000.00	100.00%
Total Site Costs	\$485,000.00	\$108,800.00	\$376,200.00	77.57%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.